

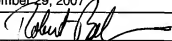
PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

SMB-PT158

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November 29, 2007

on 

Signature

Typed or printed name Robert J. Ballarini

Application Number

10/549,245

Filed

September 12, 2005

First Named Inventor

Keith Hart

Art Unit

3753

Examiner

Ramesh Krishnamurthy

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐

applicant/inventor.

☐

assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☒


attorney or agent of record. 48,684

Registration number

☐

attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34



Signature

Robert J. Ballarini

Typed or printed name

215-568-6400

Telephone number

November 29, 2007

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

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*Total of 1 forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the **PATENT APPLICATION** of:

Hart et al

Application No.: 10/549,245

Confirmation No.: 5997

Filed: September 12, 2005

For: INSERTION PART FOR INSERTING
INTO A GAS OR LIQUID LINE

Group: 3753

Examiner: Ramesh Krishnamurthy

Our File: SMB-PT158

(PC 03 560 B US)

Date: November 29, 2007

REASONS FOR PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Claims 1 – 5, 7 – 15 and 18 – 21 were finally rejected in the Office Action dated August 30, 2007. Claims 6, 16 and 17 were allowed. A Pre-Appeal Brief Review is hereby requested in the above application for the following reasons:

The invention as currently claimed in independent claim 1 is an insertion part which can be used in a gas line or a liquid line, including a housing, and a displaceable sealing body arranged in an interior of the housing which can seal a flow opening of a feeder channel in a closed position. The insertion part is provided with an annular lip shaped part having an annular body held inside the housing, and which in an area of at least one flow opening has at least one control lip as a

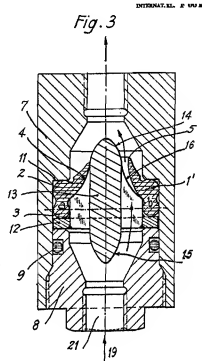
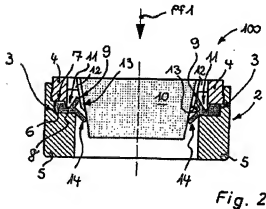
control body and at least one sealing lip as the sealing body that can be displaced by the fluid, with a free lip end region that contacts an opposing housing surface in a sealing manner in the closed position. A regulating profile is provided in the housing surface adjacent to the free lip end with a control gap being defined between the control lip and adjacent housing surface. The dimension of the control gap is variable dependent on flow pressure.

The invention as claimed in independent claim 3 is an insertion part which can be inserted into a gas line or a liquid line, embodied as a flow regulator. The insertion part includes a housing, and at least one throttle body or control body arranged in an interior of the housing which limits a control gap, depending on a flow pressure, between itself and an adjacent housing wall. The insertion part is provided with an annular lip shaped part having an annular body held inside the housing, and which has at least one control lip as the throttle body or control body and which is aligned with a free lip end region extending in a direction of an adjacent housing wall. A regulating profile is provided in the housing wall adjacent to the free lip end, which comprises grooves or moldings aligned in a flow direction; the control gap being defined between the control lip and the adjacent housing wall.

It is noted that the Examiner indicated in the Action that the reference relied upon, DE 11 54 982 B, shows limitations that are not present in the claims, i.e. "Figure 4 shows the grooves (18) to be even spaced and are configured in rounded shapes similar to that of ellipsoid or arc or polygon shaped grooves." and "The housing is indeed comprised of two parts (7, 8). A radial connecting bar (12) is disclosed that connects the core (13) to the upstream part (8) of the housing."

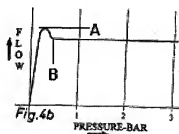
Figure 2 of the present application and Figure 3 of DE 11 54 982 B are reproduced below for the Panel's convenience. Figure 2 shows the claimed control lip 9 and sealing lip 14 as well as the groove 13. DE 11 54 982 B fails to show or

suggest a sealing lip and a regulating profile provided in the housing wall adjacent to the free lip end, which comprises grooves or moldings aligned in a flow direction as is claimed.



The Examiner failed to appreciate that DE 11 54 982 B discloses a one-way valve that does not provide any through-flow regulation as in the present invention. DE 11 54 982 B does not show an annular lip shaped part (3) having an annular body (6) held inside the housing, and which in an area of at least one flow opening has at least one control lip (9) as a control body and at least one sealing lip (14) as a sealing body, as is claimed. Further, there is no way for the valve described in DE 11 54 982 B to limit the amount of through fluid flow per unit time as in the present invention. The valve of DE 11 54 982 B is in its closed position only in the event of a back flow. The insert of the present invention provides a housing wall having a regulating profile, which is arranged in a flow direction. The lip-shaped part works

together with the regulating profile of the housing wall defining a control gap whose dimensions vary depending on pressure. Thus, movement of the free lip end towards the housing wall will keep the flow volume at a constant value. The lip-shaped part of DE 11 54 982 B is not a throttle or control body as claimed. As depicted in Figure 4b of the present invention, reproduced below (modified), as the fluid flow increases to a maximum point A, it is then reduced, by the action of the control lip, to a constant flow B.



Despite the increase in pressure, the flow amount remains constant as a result of the lip gap being reduced under increasing pressure of the medium flowing through, thereby acting as a flow rate regulator.

The Examiner also failed to consider that the valve lip 5 of DE 11 54 982 B moves towards the housing 7 when in the open position as opposed to the insertion part of the present invention that contacts an opposing housing surface in a sealing manner in the closed position.

Therefore, the valve of DE 11 54 982 B is embodied as a back-flow valve, with its sealing body being adjusted either to an open or a closed position only and is incapable of adjusting the volume to a maximum value that can flow through the water line per time unit independent from the pressure. The valve lip 5 is sealed when no fluid passes through, i.e. when it is closed as shown in the left side of Fig. 3


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Application No.: 10/549,245

above, and the opening size (and therefore flow volume) increases with pressure. In contrast, in the insert of the present invention, the lip gap is narrowed under increasing pressure of the medium flowing through, thereby acting as a flow rate regulator, so that, despite constantly rising pressure, a continuous flow volume per unit time is achieved as a result of the lip gap being reduced under increasing pressure of the medium flowing through, thereby acting as a flow rate regulator.

In view of the foregoing remarks, Applicant respectfully requests a Pre-Appeal Brief Review and a notice to that effect is respectfully requested.

Respectfully submitted,

Hart et al.

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